SEQUENCE LISTING

<110>   AMYLIN PHARMACEUTICALS, INC

<120>   METHODS AND COMPOSITIONS FOR TREATING POLYCYSTIC OVARY SYNDROME

<130>   18528.636

<140>   10/629,649
<141>   2003-07-30

<150>   10/317,126
<151>   2002-12-11

<150>   PCT/US03/01109
<151>   2003-01-14

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<170>   PatentIn version 3.2

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His Asp Glu Phe Glu Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val
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Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu
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Val Lys Gly Arg Gly
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Val Lys Gly Arg

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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
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<223> Description of Unknown Organism: Truncated form of GLP-1

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Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala
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Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
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<220>

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            20   25

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<213> Unknown

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<223> Description of Unknown Organism: Exendin 3

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His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
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Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
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Ser Gly Ala Pro Pro Pro Ser
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Trp Leu Lys Asn Gly Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser
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3

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
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Ser Gly Ala Pro Pro Pro Ser
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<213> Unknown

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Leu Ala Leu Gln Lys Tyr Leu Glu Ser Ile Leu Gly Ser Ser Thr Ser
            20   25   30

Pro Arg Pro Pro Ser Ser
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Leu Ala Leu Gln Lys Tyr Leu Glu Ser Ile Leu Gly Ser Ser Thr Ser
            20   25   30

Pro Arg Pro Pro Ser
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<213> Unknown

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4

Leu Ala Leu Gln Lys Tyr Leu Ala Ser Ile Leu Gly Ser Arg Thr Ser
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Pro Pro Pro
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<213> Unknown

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            20   25   30

Pro Pro Pro
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Ser Gly Ala Pro Pro Pro Xaa
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            20                  25


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Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
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<210> 21
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  1               5                   10                  15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
              20                  25


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            20                  25


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1                   5                   10                  15


Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            20                  25


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        as indicated in the specification

<400> 24

Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1   5   10   15

20

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Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
          20                  25
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<210> 25
<211> 29
<212> PRT
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<220>
<223> artificial sequence with specific variable residues

<220>
<221> MISC_FEATURE
<223> See specification as filed for detailed description of
      substitutions and preferred embodiments.

<220>
<221> VARIANT
<222> (1)..(1)
<223> His, Arg, Tyr, Ala, Norvaline, Val, Norleucine or
      4imidazopropionyl

<220>
<221> VARIANT
<222> (2)..(2)
<223> Ser, Gly, Ala or Thr

<220>
<221> VARIANT
<222> (3)..(3)
<223> Ala, Asp or Glu

<220>
<221> VARIANT
<222> (4)..(4)
<223> Ala, Norvaline, Val, Norleucine or Gly

<220>
<221> VARIANT
<222> (5)..(5)
<223> Ala or Thr

<220>
<221> VARIANT
<222> (6)..(6)
<223> Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (7)..(7)
<223> Thr or Ser

<220>
<221> VARIANT
<222> (8)..(8)
<223> Ala, Ser or Thr

21

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<220>
<221>  VARIANT
<222>  (9)..(9)
<223>  Ala, Noraline, Val, Norleucine, Asp or Glu

<220>
<221>  VARIANT
<222>  (10)..(10)
<223>  Ala, Leu, Ile, Val, pentylglycine or Met

<220>
<221>  VARIANT
<222>  (11)..(11)
<223>  Ala or Ser

<220>
<221>  VARIANT
<222>  (12)..(12)
<223>  Ala or Lys

<220>
<221>  VARIANT
<222>  (13)..(13)
<223>  Ala or Gln

<220>
<221>  VARIANT
<222>  (14)..(14)
<223>  Ala, Leu, Ile, pentylglycine, Val or Met

<220>
<221>  VARIANT
<222>  (15)..(17)
<223>  Ala or Glu

<220>
<221>  VARIANT
<222>  (19)..(19)
<223>  Ala or Val

<220>
<221>  VARIANT
<222>  (20)..(20)
<223>  Ala or Arg

<220>
<221>  VARIANT
<222>  (21)..(21)
<223>  Ala, Leu or Lys-NH3-R where R is Lys, Arg, C1-10 straight-chain
       or branched alkanoyl or cycloalleyl-alkanoyl

<220>
<221>  VARIANT
<222>  (22)..(22)
<223>  Phe, Tyr or naphthylalanine
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<220>
<221>  VARIANT
<222>  (23)..(23)
<223>  Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

<220>
<221>  VARIANT
<222>  (24)..(24)
<223>  Ala, Glu or Asp

<220>
<221>  VARIANT
<222>  (25)..(25)
<223>  Ala, Trp, Phe, Tyr or naphthylalanine

<220>
<221>  VARIANT
<222>  (26)..(26)
<223>  Ala or Leu

<220>
<221>  VARIANT
<222>  (27)..(27)
<223>  Lys Asn, Asn Lys, Lys-NH3-R Asn, Asn Lys-NH3-R, Lys-NH3-R Ala,
       Ala Lys-NH3-R where R is Lys, Arg, C1-C10 straight-chain or
       branched alkanoyl or cycloalkylalkanoyl

<220>
<221>  VARIANT
<222>  (28)..(28)
<223>  -OH, -NH2, Gly-OH, Gly-NH2, Gly Gly-ON, Gly Gly-NH2 and further
       as indicated in the specification

<400>  25

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1               5                   10                  15


Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            20                  25


<210>  26
<211>  39
<212>  PRT
<213>  Artificial sequence

<220>
<223>  artificial sequence with specific variable residues

<220>
<221>  MISC_FEATURE
<223>  See specification as filed for detailed description of
       substitutions and preferred embodiments.

<220>
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<221>  VARIANT
<222>  (1)..(1)
<223>  His, Arg or Tyr

<220>
<221>  VARIANT
<222>  (2)..(2)
<223>  Ser, Gly, Ala or Thr

<220>
<221>  VARIANT
<222>  (3)..(3)
<223>  Asp or Glu

<220>
<221>  VARIANT
<222>  (6)..(6)
<223>  Phe, Tyr or naphthylalanine

<220>
<221>  VARIANT
<222>  (7)..(7)
<223>  Thr or Ser

<220>
<221>  VARIANT
<222>  (8)..(8)
<223>  Thr or Ser

<220>
<221>  VARIANT
<222>  (9)..(9)
<223>  Asp or Glu

<220>
<221>  VARIANT
<222>  (10)..(10)
<223>  Leu, Ile, Val, pentylglycine or Met

<220>
<221>  VARIANT
<222>  (14)..(14)
<223>  Leu, Ile, pentylglycine, Val or Met

<220>
<221>  VARIANT
<222>  (22)..(22)
<223>  Phe, Tyr or naphthylalanine

<220>
<221>  VARIANT
<222>  (23)..(23)
<223>  Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

<220>
<221>  VARIANT
<222>  (24)..(24)
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<223> Glu or Asp

<220>
<221> VARIANT
<222> (25)..(25)
<223> Trp, Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (31)..(31)
<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
      N-alkylpentylglycine or N-alkylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
      N-alkylpentylglycine or N-alkylalanine

<220>
<221> VARIANT
<222> (39)..(39)
<223> Ser, Thr or Tyr and is optionally amidated

<220>
<221> VARIANT
<222> (39)..(39)
<223> Ser-OH, Ser-NH3, Thr-OH, Thr-NH3, Tyr-OH or Tyr-NH3

<400> 26

Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Xaa
        35

<210> 27
<211> 38
<212> PRT
<213> Artificial sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MISC_FEATURE
<223> See specification as filed for detailed description of
      substitutions and preferred embodiments.

<220>

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<221>  VARIANT
<222>  (1)..(1)
<223>  His, Arg, Tyr or 4-imidazopropionyl

<220>
<221>  VARIANT
<222>  (2)..(2)
<223>  Ser, Gly, Ala or Thr

<220>
<221>  VARIANT
<222>  (3)..(3)
<223>  Asp or Glu

<220>
<221>  VARIANT
<222>  (6)..(6)
<223>  Phe, Tyr or naphthylalanine

<220>
<221>  VARIANT
<222>  (7)..(7)
<223>  Thr or Ser

<220>
<221>  VARIANT
<222>  (8)..(8)
<223>  Ser or Thr

<220>
<221>  VARIANT
<222>  (9)..(9)
<223>  Asp or Glu

<220>
<221>  VARIANT
<222>  (10)..(10)
<223>  Leu, Ile, Val, pentylglycine or Met

<220>
<221>  VARIANT
<222>  (14)..(14)
<223>  Leu, Ile, pentylglycine, Val or Met

<220>
<221>  VARIANT
<222>  (22)..(22)
<223>  Phe, Tyr or naphthylalanine

<220>
<221>  VARIANT
<222>  (23)..(23)
<223>  Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

<220>
<221>  VARIANT
<222>  (24)..(24)
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<223>  Glu or Asp

<220>
<221>  VARIANT
<222>  (25)..(25)
<223>  Trp, Phe, Tyr or naphthylalanine

<220>
<221>  VARIANT
<222>  (27)..(27)
<223>  Lys, Asn, Asn, Lys, Lys-NH3-R Asn, Asn, Lys-NH3-R where R is Lys,
       Arg, C1-C10 straight-chain or branched alkanoyl or
       cycloalkylalkanoyl

<220>
<221>  VARIANT
<222>  (30)..(30)
<223>  Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
       N-alkylpentylglcyine or N-alkylalanine

<220>
<221>  misc_feature
<222>  (30)..(30)
<223>  Xaa can be any naturally occurring amino acid

<220>
<221>  VARIANT
<222>  (35)..(37)
<223>  Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
       N-alkylpentylglcyine or N-alkylalanine

<220>
<221>  VARIANT
<222>  (38)..(38)
<223>  Ser, Thr or Tyr, which is optionally amidated

<220>
<221>  VARIANT
<222>  (38)..(38)
<223>  Ser-OH, Ser-NH3, Thr-OH, Thr-NH3, Tyr-OH or Tyr-NH3

<400>  27

Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
1               5                   10                  15


Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Xaa Gly Gly Xaa Ser Ser
            20                  25                  30


Gly Ala Xaa Xaa Xaa Xaa
        35


<210>  28
<211>  30
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27

<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<400> 28
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
            20   25   30

<210> 29
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (30)
<223> OPTIONAL AMIDATION, Position 30 may be Gly-NH2

<400> 29
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
            20   25   30

<210> 30
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 30
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Ala Ile Glu Phe Leu Lys Asn
            20   25

<210> 31

28

<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 31
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 32
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 32
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 33
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES

29

<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 33
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 34
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 34
Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 35
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Tyr-NH2

<400> 35
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Tyr
            35

<210> 36
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 36
His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
                20   25   30

Ser Gly Ala Pro Pro Pro Ser
            35

<210> 37
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<220>
<221> VARIANT
<222> (6)
<223> Xaa is napthylalanine

<400> 37
His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
                20   25   30

Ser Gly Ala Pro Pro Pro Ser
            35

<210> 38
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 38
His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
         35

<210> 39
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 39
His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
         35

<210> 40
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

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<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 40
His Gly Glu Gly Thr Phe Thr Thr Asp Leu Ser Lys Gln Met Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
        35


<210> 41
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 41
His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
        35


<210> 42
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<220>
<221> VARIANT
<222> (10)
<223> Xaa is pentylglycine
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<400> 42
His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
               20   25   30

Ser Gly Ala Pro Pro Pro Ser
          35

<210> 43
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<220>
<221> VARIANT
<222> (10)
<223> Xaa is pentylglycine

<400> 43
His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
               20   25   30

Ser Gly Ala Pro Pro Pro Ser
          35

<210> 44
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<220>
<221> VARIANT
<222> (14)

<223> Xaa is pentylglycine

<400> 44
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 45
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<220>
<221> VARIANT
<222> (14)
<223> Xaa is pentylglycine

<400> 45
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 46
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<220>
<221> VARIANT

<222> (22)
<223> Xaa is napthylalanine

<400> 46
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
         35

<210> 47
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 47
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
         35

<210> 48
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 48
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
          35

<210> 49
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (23)
<223> Xaa at Position 23 is tertiary-butylglycine

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 49
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn Gly Gly Pro Ser
              20   25   30

Ser Gly Ala Pro Pro Pro Ser
          35

<210> 50
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is tertiary-butylglycine

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 50
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn Gly Gly Pro Ser

37

(empty line)

                    20   25   30

Ser Gly Ala Pro Pro Pro Ser
          35

<210> 51
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 51
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn Gly Gly Pro Ser
              20   25   30

Ser Gly Ala Pro Pro Pro Ser
          35

<210> 52
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, position 39 may be Ser-NH2

<400> 52
His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
              20   25   30

Ser Gly Ala Pro Pro Pro Ser
          35

<210> 53
<211> 39
<212> PRT

<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is thioproline

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 36, and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 53
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser
        35

<210> 54
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 54
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser

<210> 55
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is homoproline

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is homoproline

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 55
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser
         35

<210> 56
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is homoproline

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 56
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

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      1                5                    10                      15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
           20                   25                      30

Ser Gly Ala Xaa Xaa Xaa Ser
          35


<210> 57
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is thioproline

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 57
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
  1            5                   10                      15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
           20                   25                      30

Ser Gly Ala Xaa Xaa Xaa Ser
          35


<210> 58
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is homoproline

<220>
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41

<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36,37, and 38 is homoproline

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 58
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
             20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser
         35

<210> 59
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is N-methylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 59
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
             20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser
         35

<210> 60
<211> 39
<212> PRT

<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 60
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser
         35

<210> 61
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is N-methylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 61
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser

43

<210> 62
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 62
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 63
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 63
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 64
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 64
His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 65
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 65
His Gly Glu Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 66
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 66
His Gly Glu Gly Thr Ala Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 67
<211> 28
<212> PRT
<213> Artificial Sequence

<220>

<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 67
His Gly Glu Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 68
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 68
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 69
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 69
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 70
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 70
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 71
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 71
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 72
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 72
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu

47

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
                20   25

<210> 73
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 73
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
                20   25

<210> 74
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 74
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Ala
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
                20   25

<210> 75
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>

<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 75
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 76
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 76
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 77
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 77
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 78
<211> 28
<212> PRT

<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 78
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 79
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 79
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Ala Phe Leu Lys Asn
            20   25

<210> 80
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 80
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn

<210> 81
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 81
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Asn
            20   25

<210> 82
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 82
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Asn
            20   25

<210> 83
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Ala-NH2

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<400> 83
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
            20                  25


<210> 84
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be Pro-NH2

<400> 84
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro
        35


<210> 85
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be Pro-NH2

<400> 85
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro
        35
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<210> 86
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be Pro-NH2

<400> 86
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro
        35

<210> 87
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be Pro-NH2

<400> 87
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro
        35

<210> 88
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>

53

<221> MOD_RES
<222> (36)
<223> OPTIONAL AMIDATION, Position 36 may be Pro-NH2

<400> 88
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro
        35

<210> 89
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (36)
<223> OPTIONAL AMIDATION, Position 36 may be Pro-NH2

<400> 89
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro
        35

<210> 90
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (35)
<223> OPTIONAL AMIDATION, Position 35 may be Ala-NH2

<400> 90
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser

Ser Gly Ala
        35

<210> 91
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (35)
<223> OPTIONAL AMIDATION, Position 35 may be Ala-NH2

<400> 91
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala
        35

<210> 92
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (34)
<223> OPTIONAL AMIDATION, Position 34 may be Gly-NH2

<400> 92
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly

<210> 93
<211> 34
<212> PRT

<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (34)
<223> OPTIONAL AMIDATION, Position 34 may be Gly-NH2

<400> 93
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly

<210> 94
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (33)
<223> OPTIONAL AMIDATION, Position 33 may be Ser-NH2

<400> 94
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser

<210> 95
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (33)
<223> OPTIONAL AMIDATION, Position 33 may be Ser-NH2

56

<400> 95
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser

<210> 96
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (32)
<223> OPTIONAL AMIDATION, Position 32 may be Ser-NH2

<400> 96
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

<210> 97
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (32)
<223> OPTIONAL AMIDATION, Position 32 may be Ser-NH2

<400> 97
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

<210> 98
<211> 31
<212> PRT

<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (31)
<223> OPTIONAL AMIDATION, Position 31 may be Pro-NH2

<400> 98
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
            20   25   30

<210> 99
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (31)
<223> OPTIONAL AMIDATION, Position 31 may be Pro-NH2

<400> 99
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro
            20   25   30

<210> 100
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (30)
<223> OPTIONAL AMIDATION, Position 30 may be Gly-NH2

<400> 100
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly

<210> 101
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (29)
<223> OPTIONAL AMIDATION, Position 29 may be Gly-NH2

<400> 101
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
            20   25

<210> 102
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (29)
<223> OPTIONAL AMIDATION, Position 29 may be Gly-NH2

<400> 102
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
            20   25

<210> 103
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> VARIANT
<222> (31)
<223> Xaa is thioproline

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<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa is thioproline

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be thioproline-NH2

<400> 103
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20                  25                  30

Ser Gly Ala Xaa Xaa Xaa
        35


<210> 104
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa is thioproline

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be thioproline-NH2

<400> 104
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Xaa Xaa Xaa
        35


<210> 105
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
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<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa is N-methylalanine

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be Pro-NH2

<400> 105
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Pro Pro
        35

<210> 106
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa is N-methylalanine

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa is N-methylalanine

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be N-methylalanine-NH2

<400> 106
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa
        35

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<210> 107
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa is homoproline

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa is homoproline

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be homoproline-NH2

<400> 107
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20                  25                  30

Ser Gly Ala Xaa Xaa
            35


<210> 108
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa is homoproline

<220>
<221> VARIANT
<222> (36)
<223> Xaa is homoproline

<220>
<221> MOD_RES
<222> (36)
<223> OPTIONAL AMIDATION, Position 36 may be homoproline-NH2
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<400> 108
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa
        35

<210> 109
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (35)
<223> OPTIONAL AMIDATION, Position 35 may be Ala-NH2

<400> 109
Arg Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala
        35

<210> 110
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (30)
<223> OPTIONAL AMIDATION, Position 30 may be Gly-NH2

<400> 110
His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
            20   25   30

<210> 111

63

<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (6)
<223> Xaa is napthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 111
His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 112
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 112
His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 113
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)

<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 113
His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 114
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 114
His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Ala Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 115
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (10)
<223> Xaa is pentylglycine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 115
His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

65

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<210> 116
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (22)
<223> Xaa is napthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 116
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
            20                  25


<210> 117
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (23)
<223> Xaa is tertiary-butylglycine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 117
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
            20                  25


<210> 118
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 118
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
            20   25

<210> 119
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (33)
<223> OPTIONAL AMIDATION, Position 33 may be Ser-NH2

<400> 119
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser

<210> 120
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (29)
<223> OPTIONAL AMIDATION, Position 29 may be Gly-NH2

<400> 120
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
            20   25

<210> 121
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa is homoproline

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa is homoproline

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be homoproline-NH2

<400> 121
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa
          · 35

<210> 122
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 122
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

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<210> 123
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 123
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20                  25


<210> 124
<211> 28
<212> PRT
<213> artificial sequence with specific variable residues

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 124
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20                  25


<210> 125
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 125
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
1               5                   10                  15
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Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
          20                  25


<210> 126
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 126
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20                  25


<210> 127
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 127
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20                  25


<210> 128
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
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<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 128
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 129
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 129
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 130
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 130
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 131
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 131
Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 132
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 132
Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 133
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 133
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

72

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<210> 134
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 134
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20                  25


<210> 135
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 135
Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20                  25


<210> 136
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2
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<400> 136
Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 137
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (6)
<223> Xaa is napthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 137
Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 138
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (6)
<223> Xaa is napthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 138
Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn

74

<210> 139
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 139
Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 140
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 140
Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 141
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 141
Ala Gly Asp Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 142
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 142
Ala Gly Asp Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 143
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 143
Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 144
<211> 28
<212> PRT
<213> Artificial Sequence

<220>

<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 144
Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 145
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 145
Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 146
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 146
Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 147
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 147
Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 148
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 148
Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 149
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (10)
<223> Xaa is pentylgylcine

<220>
<221> MOD_RES

<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 149
Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 150
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (10)
<223> Xaa is pentylgylcine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 150
Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 151
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 151
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 152
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 152
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 153
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 153
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 154
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 154

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 155
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 155
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 156
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 156
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 157
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 157
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 158
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 158
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 159
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (14)
<223> Xaa is pentylgylcine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 159
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn

<210> 160
<211> 28
<212> PRT
<213> Artificial Sequence   ⌐

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (14)
<223> Xaa is pentylgylcine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 160
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
                20   25

<210> 161
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 161
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Ala Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
                20   25

<210> 162
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 162
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 163
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 163
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Ala
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 164
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 164
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Ala
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 165

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<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 165
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Ala Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 166
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 166
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 167
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 167
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

85

Glu Ala Ala Arg Leu Phe Ile Glu Trp Leu Lys Asn
             20   25

<210> 168
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 168
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
             20   25

<210> 169
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 169
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Ala Leu Phe Ile Glu Trp Leu Lys Asn
             20   25

<210> 170
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES

86

<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 170
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 171
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 171
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Ala Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 172
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 172
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 173
<211> 28
<212> PRT
<213> Artificial Sequence

87

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (22)
<223> Xaa is napthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 173
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn
            20   25

<210> 174
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (22)
<223> Xaa is napthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 174
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
            20   25

<210> 175
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>

<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 175
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn
            20   25

<210> 176
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 176
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn
            20   25

<210> 177
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (23)
<223> Xaa is tertiary-butylglycine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 177
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
            20   25

89

<210> 178
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (23)
<223> Xaa is tertiary-butylglycine

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 178
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn
            20   25

<210> 179
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 179
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn
            20   25

<210> 180
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 180
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
            20   25

<210> 181
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 181
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
            20   25

<210> 182
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 182
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
            20   25

<210> 183
<211> 28

<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 183
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Ala Lys Asn
            20   25

<210> 184
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 184
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Asn
            20   25

<210> 185
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 185
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

92

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Ala Asn
              20   25

<210> 186
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Asn-NH2

<400> 186
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Asn
              20   25

<210> 187
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)
<223> OPTIONAL AMIDATION, Position 28 may be Ala-NH2

<400> 187
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Ala
              20   25

<210> 188
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (28)

<223> OPTIONAL AMIDATION, Position 28 may be Ala-NH2

<400> 188
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
            20   25

<210> 189
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be Pro-NH2

<400> 189
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro
          35

<210> 190
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be Pro-NH2

<400> 190
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro
          35

94

<210> 191
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be Pro-NH2

<400> 191
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro
        35

<210> 192
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (36)
<223> OPTIONAL AMIDATION, Position 36 may be Pro-NH2

<400> 192
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro
        35

<210> 193
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (36)
<223> OPTIONAL AMIDATION, Position 36 may be Pro-NH2

<400> 193
Ala Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro
        35

<210> 194
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (35)
<223> OPTIONAL AMIDATION, Position 35 may be Ala-NH2

<400> 194
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala
        35

<210> 195
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (35)
<223> OPTIONAL AMIDATION, Position 35 may be Ala-NH2

<400> 195
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   ·10   15

96

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala
        35

<210> 196
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (34)
<223> OPTIONAL AMIDATION, Position 34 may be Gly-NH2

<400> 196
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly

<210> 197
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (33)
<223> OPTIONAL AMIDATION, Position 33 may be Ser-NH2

<400> 197
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser

<210> 198
<211> 32

<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (32)
<223> OPTIONAL AMIDATION, Position 32 may be Ser-NH2

<400> 198
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

<210> 199
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (32)
<223> OPTIONAL AMIDATION, Position 32 may be Ser-NH2

<400> 199
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

<210> 200
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (31)
<223> OPTIONAL AMIDATION, Position 31 may be Pro-NH2

<400> 200
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
            20   25   30

<210> 201
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (30)
<223> OPTIONAL AMIDATION, Position 30 may be Gly-NH2

<400> 201
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
            20   25   30

<210> 202
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (29)
<223> OPTIONAL AMIDATION, Position 29 may be Gly-NH2

<400> 202
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
            20   25

<210> 203
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)

99

<223> Xaa is thioproline

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa is thioproline

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be thioproline-NH2

<400> 203
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa
        35

<210> 204
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa is thioproline

<220>
<221> MOD_RES
<222> (38)
<223> OPTIONAL AMIDATION, Position 38 may be thioproline-NH2

<400> 204
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa
        35

<210> 205
<211> 37
<212> PRT

100

<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa is N-methylalanine

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa is N-methylalanine

<220>
<221> MOD_RES
<222> (37)
<223> OPTIONAL AMIDATION, Position 37 may be N-methylalanine-NH2

<400> 205
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa
            35

<210> 206
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> VARIANT
<222> (31)
<223> Xaa is homoproline

<220>
<221> VARIANT
<222> (36)
<223> Xaa is homoproline

<220>
<221> MOD_RES
<222> (36)
<223> OPTIONAL AMIDATION, Position 36 may be homoproline-NH2

<400> 206
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

101

```
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20                  25                  30

Ser Gly Ala Xaa
            35


<210> 207
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (35)
<223> OPTIONAL AMIDATION, Position 35 may be Ala-NH2

<400> 207
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala
            35


<210> 208
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (30)
<223> OPTIONAL AMIDATION, Position 30 may be Gly-NH2

<400> 208
His Gly Asp Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1               5                   10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
            20                  25                  30


<210> 209
<211> 39
<212> PRT
<213> Artificial Sequence
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<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 209
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 210
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable residues

<220>
<221> MOD_RES
<222> (39)
<223> OPTIONAL AMIDATION, Position 39 may be Ser-NH2

<400> 210
Ala Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 211
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial sequence with specific variable
      residues

<220>
<221> MOD_RES
<222> 1
<223> OPTIONAL AMIDATION, Gly at position 1 is optionally

103

amidated in the case that residues in positions
2-10 are absent

<220>
<221> MOD_RES
<222> 2
<223> OPTIONAL AMIDATION, Gly at position 2 may be optional and
      optionally amidated in the case that residues in
      positions 3-10 are absent

<220>
<221> VARIANT
<222> 3
<223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,
      thioproline, N-Alkylglycine, N-alkylpentylglycine,
      or N-alklalanine and is optionally amidated in the
      case that residues in positions 4...10 are absent

<220>
<221> MOD_RES
<222> 4
<223> OPTIONAL AMIDATION, Ser at position 4 is optionally
      amidated in the case that residues in positions
      5-10 are absent

<220>
<221> MOD_RES
<222> 5
<223> OPTIONAL AMIDATION, Ser at position 5 is optionally
      amidated in the case that residues in positions
      6-10 are absent

<220>
<221> MOD_RES
<222> 6
<223> OPTIONAL AMIDATION, Gly at position 6 is optionally
      amidated in the case that residues in position
      7-10 are absent

<220>
<221> MOD_RES
<222> 7
<223> OPTIONAL AMIDATION, Ala at position 7 is optionally
      amidated in the case that residues in positions
      8-10 are absent

<220>
<221> VARIANT
<222> 8
<223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,
      thioproline, N-alkylglycine, N-alkylpentylglycine,
      or N-alkylalanine and is optionally amidated in
      the case that residues in positions 9-10 are absent

<220>
<221> VARIANT
<222> 9

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<223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,
      thioproline, N-alkylglycine, N-alkylpentylglycine,
      or N-alkylalanine and is optionally amidated in
      the case that residues in position 10 are absent

<220>
<221> VARIANT
<222> 10
<223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,
      thioproline, N-alkylglycine, N-alkylpentylglycine,
      or N-alkylalanine and is optionally amidated


<400> 211
Gly Gly Xaa Ser Ser Gly Ala Xaa Xaa Xaa
 1               5                   10
```